**IMPAC: A tool for making pregnancy safer**

Dr Jitendra

**Introduction:**

The integrated management of pregnancy and childbirth (IMPAC) is the technical component of the global strategy, *Making Pregnancy Safer (MPS)*. It is based on the latest available scientific evidence. It is a low-cost strategy based on WHO's Mother-Baby Package designed to prevent maternal and infant deaths and the lifelong disability due to complications of pregnancy and childbirth.

IMPAC relates to basic essential care at the primary level and also management of complications where more advanced facilities are available. Its guidelines are intended for physicians, nurses, midwives, community outreach workers, and others involved in the provision of basic and emergency care and advice at various levels of service delivery.

IMPAC strategy ensures access to:

* antenatal care
* normal delivery care assisted by a skilled birth attendant
* treatment for complications of pregnancy (including hemorrhage, obstructed labour, eclampsia, sepsis, abortion complications)
* neonatal care
* family planning advice
* management of sexually transmitted infections.

**Need of IMPAC:**  In modern times, improvements in knowledge and technological advances have greatly improved the health of mother and children. However, the past decade was marked by limited progress in reducing maternal mortality. There was also a slow-down in the steady decline of childhood mortality observed since the mid 1950s in many countries, largely due to a failure in reducing neonatal mortality.

Every year about eight million women suffer pregnancy-related complications. Over half a million die mainly d/t severe bleeding, infections, unsafe abortions, hypertension, and obstructed labour. More than 90% of these deaths occur in Asia and sub-Saharan Africa (In developing countries, 1 in 16 women die of pregnancy-related complications compared to 1 in 2800 in developed countries). In addition, over 50 million women suffer from acute pregnancy-related conditions -- over a third of them with long-term, painful, and often distressing conditions that will affect them for the rest of their lives. They include permanent incontinence, chronic pain, nerve and muscle damage, and infertility.

Every year, over four million neonates die, mostly during the critical first week of life; and for every newborn who dies, another is stillborn. Most deaths are d/t poor maternal health and nutrition, inadequate care during pregnancy and delivery, lack of essential care of newborn baby, infections, birth injury, asphyxia, and premature births. Despite being so common these problems remain least recognized in many societies. Although these problems can be prevented at low cost with limited resources, the right kind of information for action is needed.

Improvements in mother & newborn health do not require sophisticated and expensive technologies and highly specialized staff. It requires an essential care during pregnancy, assistance of a person with midwifery skills during childbirth and immediate postpartum care. A few critical interventions for the newborn during the first few days of life is also essential. Hence, an approach for integrated management of pregnancy & childbirth is most essentially required and this generated need for IMPAC.

**Aim of IMPAC:**

IMPAC aims at improving maternal and newborn health. It addresses different factors crucial to the access of skilled care before, during and after pregnancy and childbirth. IMPAC targets health systems, health workers, as well as families and communities and also establishes coordination among them.

*Health systems*

IMPAC aims at improving the access to health system and the improvement of quality of essential and emergency care. This objective involves national health policy and district level management of infrastructure, supplies and financing. Further it includes the assessment of local needs and surveillance of health system performance.

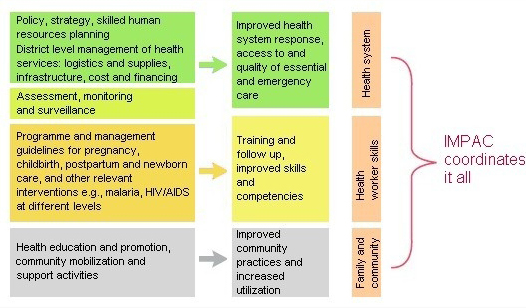
*Health workers*

Improvement of the skills and competence of health care workers is the second strategy of the IMPAC approach whereby clinical guidelines for care before, during and after birth are provided. It also cooperates with other health programs to integrate further services into antenatal care, for example the prevention of HIV mother-to-child transmission (PMTCT) or malaria treatment.

*Family and community*

Deep-rooted cultural beliefs in families and communities greatly influence women's decision whether she seeks skilled care during pregnancy and childbirth. To increase the utilization of available health services, communities can offer health education as well as logistic or financial support.

*Figure* showing different targets of IMPAC: health systems, health workers skills, and family & community

****

**Development of Standards for Maternal and Neonatal Care:**

A *Steering Committee* and a *Standards Development Advisory Group* were established. Drafts standards were developed internally by the technical staff in MPS in consultation with additional experts from the Department of Reproductive Health and Research (RHR) and experts external to WHO. These drafts were then shared with other relevant departments, including Child and Adolescent Health and Development (CAH); Stop TB; Global Malaria Program (GMP); HIV/AIDS; Nutrition for Health and Development (NHD); Immunization, Vaccines and Biologicals (IVB); Technical Cooperation for Essential Drugs and Traditional Medicine (HTP/TCM); Essential Health Technologies; Health Policy, development and Services (HDS); and Human Resources for Health (HRH) for ensuring technical accuracy and consistency with other WHO programs. Starting from their early development stage the drafts were also shared with WHO Regional offices and MPS country focal points, to gather input on their applicability in different contexts. Additional inputs have been requested from external experts and institutions throughout the entire development process.

The Clinical Standards and the Health service Delivery were reviewed in a technical consultation in Geneva in 2002 and 2004 respectively.

***Three guiding principles*** were used in the selection of the topics:

1. Public health relevance, as major causes of maternal, fetal or neonatal mortality and/or morbidity;

2. Feasibility of implementation at first level facilities in settings with limited resources, both from the health service delivery and community perspective;

3. Cost implications, such as cost-effectiveness.

To develop the standards, a systematic process and methodology for gathering and summarizing the evidence was developed. For the Clinical Standards the following sources were used: Medline, Embase, and Cinhal, the Cochrane Library, Medline and the WHO Reproductive Health Library, WHO publications based on technical working groups and expert reviews, and a number of articles and websites based on reference lists review and WHO guidelines. For the Health Service Delivery Standards the search included: PubMed, Sciencedirect, EconLit, Interscience, Popline, IDEA, and ECONbase, as well as the databases of relevant organizations, departments, and institutions, such as the World Health Organization, World Bank, Save the children and others as identified by the standards development subgroup.

**WHO Recommended Interventions for Improving Maternal and Newborn Health**

Maternal and newborn health care programs should include key interventions to improve maternal and newborn health and survival. The following five tables include these key interventions to be delivered through health services, family and the community.

**Table 1** lists interventions delivered to the mother during pregnancy, childbirth

and in the postpartum period, and to the newborn soon after birth. These include important preventive, curative and health promotional activities for the present as well as the future.

*Routine essential care-* Care to all women and babies

*Situational care-* Care dependent on disease patterns in the community.

A*dditional care- Care to* women and babies with moderately severe diseases or complications

*Specialized care-* Care to women and babies with severe diseases or complications.

**Table 1. Care in pregnancy, childbirth and postpartum period for mother and newborn infant**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Routine care**  (offered to all women and babies) | **Additional care**  (for women and babies with moderately  severe diseases and complications) | **Specialized - obstetrical and**  **neonatal care**  (for women and babies with severe  diseases and complications) |
| **Pregnancy care -**  4 visits  *Essential* | • Confirmation of pregnancy  • Monitoring of progress of pregnancy  and assessment of maternal and fetal  well-being  • Detection of problems complicating  pregnancy (e.g., anaemia, hypertensive  disorders, bleeding, malpresentations,  multiple pregnancy  • Respond to other reported complaints.  •Tetanus immunization, anaemia  prevention and control (iron and folic  acid supplementation)  • Information and counselling on self  care at home, nutrition, safer sex,  breastfeeding, family planning, healthy  lifestyle  • Birth and emergency planning, advice  on danger signs and emergency  preparedness  • Recording and reporting  • Syphilis testing | • Treatment of mild to moderate pregnancy complications:  - mild to moderate anaemia  - urinary tract infection  - vaginal infection  • Post abortion care and family planning  • Pre-referral treatment of severe  complications  - pre-eclampsia  - eclampsia  - bleeding  - infection  - complicated abortion  • Support for women with special needs  e.g. adolescents, women living with  violence  • Treatment of syphilis (woman and her  partner) | • Treatment of severe pregnancy  complications:  - anaemia  - severe pre-eclampsia  - eclampsia  - bleeding  - infection  - other medical complications  • Treatment of abortion complications |
| *Situational* | • HIV testing and counselling  • Antimalarial Intermittent preventive  treatment (IPT) and promotion of  insecticide treated nets (ITN)  • Deworming  • Assessment of female genital  mutilation (FGM) | • Prevention of mother to child  transmission of HIV (PMTCT) by  antiretroviral treatment (ART), infant  feeding counselling, mode of delivery  advice  • Treatment of mild to moderate  opportunistic infections  • Treatment of uncomplicated malaria | • Treatment of severe HIV infection  • Treatment of complicated malaria |
| **Childbirth Care**  (labour, delivery, and  immediate postpartum)  *Essential* | • Care during labour and delivery  - Diagnosis of labour  - Monitoring progress of labour,  maternal and fetal well-being with  partograph  - Providing supportive care and pain  relief  - Detection of problems  and complications (e.g.  malpresentations, prolonged and/or  obstructed labour, hypertension,  bleeding, and infection)  - Delivery and immediate care of  the newborn baby, initiation of  breastfeeding  - Newborn resuscitation  - Active management of third stage  of labour  • Immediate postpartum care of mother  - Monitoring and assessment of  maternal well being, prevention  and detection of complications (e.g.  hypertension, infections, bleeding,  anaemia)  - Treatment of moderate posthaemorrhagic  anaemia  - Information and counselling on  home self care, nutrition, safe sex,  breast care and family planning  - Advice on danger signs, emergency  preparedness and follow-up  • Recording and reporting | • Treatment of abnormalities and  complications (e.g. prolonged  labour, vacuum extraction; breech  presentation, episiotomy, repair of  genital tears, manual removal of  placenta)  • Pre-referral management of serious  complications (e.g. obstructed labour,  fetal distress, preterm labour, severe  peri- and postpartum haemorrhage)  • Emergency management of  complications if birth imminent  • Support for the family if maternal  death | • Treatment of severe complications  in childbirth and in the immediate  postpartum period, including caesarean  section, blood transfusion and  hysterectomy):  - obstructed labour  - malpresentations  - eclampsia  - severe infection  - bleeding  • Induction and augmentation of labour |
| *Situational* | • Vitamin A administration | • Prevention of mother-to-child  transmission of HIV by mode of  delivery, guidance and support for  chosen infant feeding option | • Management of complications related  to FGM |
| **Postpartum maternal**  **care** (up to 6 weeks)  *Essential* | • Assessment of maternal wellbeing  • Prevention and detection of  complications (e.g. infections, bleeding,  anaemia)  • Anaemia prevention and control (iron  and folic acid supplementation)  • Information and counselling on  nutrition, safe sex, family planning  and provision of some contraceptive  methods  • Advice on danger signs, emergency  preparedness and follow-up  • Provision of contraceptive methods | • Treatment of some problems (e.g. mild  to moderate anaemia, mild puerperal  depression)  • Pre-referral treatment of some  problems (e.g. severe postpartum  bleeding, puerperal sepsis) | • Treatment of all complications  - severe anaemia  - severe postpartum bleeding  - severe postpartum infections  - severe postpartum depression  • Female sterilization |
| *Situational* | • Promotion of ITN use | • Treatment of uncomplicated malaria | • Treatment of complicated malaria |
| **Newborn care**  (birth and immediate  postnatal)  *Essential* | • Promotion, protection and support for  breastfeeding  • Monitoring and assessment of  wellbeing, detection of complications  (breathing, infections, prematurity, low  birthweight, injury, malformation)  • Infection prevention and control,  rooming-in  • Eye care  • Information and counselling on home  care, breastfeeding, hygiene  • Advice on danger signs, emergency  preparedness and follow-up  • Immunization according to the national  guidelines (BCG, HepB, OPV-0) | • Care if moderately preterm, low  birth weight or twin: support for  breastfeeding, warmth, frequent  assessment of wellbeing and detection  of complications e.g. feeding difficulty,  jaundice, other perinatal problems  • Kangaroo Mother Care follow-up  • Treatment of mild to moderate  - local infections (cord, skin, eye,  thrush)  - birth injuries  • Pre-referral management of infants  with severe problems:  - very preterm babies and/or birth  weight very low  - severe complications  - malformations  • Supporting mother if perinatal death. | • Management of severe newborn  problems - general care for the sick  newborn and management of specific  problems:  - preterm birth  - breathing difficulty  - sepsis  - severe birth trauma and asphyxia  - severe jaundice  - Kangaroo Mother Care (KMC)  • Management of correctable  malformations |
| *Situational* | • Promotion of sleeping under ITN | • Presumptive treatment of congenital  syphilis  • Prevention of mother-to-child  transmission of HIV by ART  • Support for infant feeding of maternal  choice | • Treatment of:  - congenital syphilis  - neonatal tetanus |
| **Postnatal newborn care**  (visit from/at home)  *Essential* | • Assessment of infant’s wellbeing and  breastfeeding  • Detection of complications and  responding to maternal concerns  • Information and counselling on home  care  • Additional follow-up visits for high  risk babies (e.g. preterm, after severe  problems, on replacement feeding) | • Management of:  - minor to moderate problems and  - feeding difficulties  • Pre-referral management of severe  problems:  - convulsions  - inability to feed  • Supporting the family if perinatal death | • Management of severe newborn  problems:  - sepsis  - other infections  - jaundice  - failure to thrive |

**Table 2** lists the places where care should be provided through health services, the type of providers required and the recommended interventions and commodities at each level.

**Table 2. Place of care, providers, interventions and commodities**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Health care** | **Level of**  **health care** | **Venue / place** | **Provider** | **Interventions and**  **commodities** |
| **Pregnancy (antenatal) care** |  |  |  |  |
| **Routine** | **Primary** | • Health centre in the community  • Outpatient clinic of a hospital  • Outreach home visit | • Health worker with midwifery  skills\* | • On site tests (Hb, syphilis)  • Maternal health record  • Vaccine  • Basic oral medicines |
| **Situational** | **Primary** | • Health centre in the community  • Outpatient clinic of a hospital  • Outreach home visits | • Health worker with midwifery  skills\* | • On site tests (HIV)  • Insecticide treated nets (ITN) |
| **Additional** | **Primary** | • Health centre in the community  • Outpatient clinic of a hospital | • Health worker with midwifery and  selected obstetric and neonatal  skills\* | • IV fluids  • Parenteral drugs (antibiotics,  MgSO4, antimalarial)  • Manual Vacuum Aspiration (MVA)  • Anti-retroviral therapy (ART) |
| **Specialized** | **Secondary** | • Hospital | • Team of doctors, midwives and  nurses | All of the above plus:  • Blood transfusion  • Surgery  • Laboratory tests  • Obstetric care |
| **Childbirth (mother and baby)** |  |  |  |  |
| **Routine** | **Primary** | • Health centre in the community  • Maternity ward of a hospital  • Outreach home care | • Health worker with midwifery  skills\* | • Delivery set  • Oxytocin  • Partograph |
| **Situational** | **Primary** | • Health centre in the community  • Maternity ward of a hospital  • Outreach home care | • Health worker with midwifery  skills\* | • ART |
| **Additional** | **Primary** | • Health centre in the community  • Maternity ward of a hospital | • Health worker with midwifery and  selected obstetric and neonatal  skills\* | • Vacuum extraction  • Manual removal of placenta  • Repair of genital tears  • IV fluids  • MgSO4, parenteral uterotonics, and  antibiotics  • Newborn resuscitation |
| **Specialized Mother** | **Secondary** | • Hospital | • Team of doctors, midwives and  nurses with neonatal care skills | All of the above plus:  • Surgery  • Blood transfusion |
| **Specialized**  **Newborn** | **Secondary** | • Hospital | • Team of doctors and nurses with  obstetric and nursing skills | • Oxygen  • IV fluids  • Parenteral antebiotics  • Blood transfusion  • Laboratory - biochemical and  microbiology (small blood samples) |
| **Postpartum (mother), postnatal (newborn infant)** |  |  |  |  |
| **Routine** | **Primary** | • Health centre in the community  • Outpatient clinic of a hospital  • Outreach home visit | • Health worker with midwifery  skills\* | • On site tests (Hb, syphilis)  • Vaccines  • Basic oral medicines |
| **Situational** | **Primary** | • Health centre in the community  • Outpatient clinic of a hospital | • Health worker with midwifery  skills\* | • On site tests (HIV)  • ART |
| **Additional** | **Primary** | • Health centre in the community  • Outpatient clinic of a hospital | • Health worker with midwifery and  selected obstetric and neonatal  skills\* | • IV fluids  • Parenteral drugs (antibiotics,  MgSO4, antimalarial)  • Manual removal of placenta |
| **Specialized Mother** | **Secondary** | • Hospital | • Team of doctors, midwives and  nurses | All of the above plus:  • Blood transfusion  • Surgery  • Laboratory tests  • Obstetric care |
| **Specialized**  **Newborn** | **Secondary** | • Hospital | • Team of doctors, midwives and  nurses with neonatal skills | • Oxygen  • IV fluids  • Parenteral antebiotics  • Blood transfusion  • Laboratory - biochemical and  microbiology (small samples) |

\* Health worker providing maternity care only or a health worker providing other services in addition to maternity care

**Table 3** lists practices, activities and support needed during pregnancy and childbirth by the family, community and workplace.

**Table 3. Home care, family, community and workplace support for the woman during pregnancy and childbirth and for the newborn infant**

|  |  |  |
| --- | --- | --- |
|  | **Home/family** | **Community and workplace** |
| **Pregnancy** | • Safe and nutritive diet  • Safe sexual practices  • Support for quitting smoking  • Protection from passive tobacco smoking  • Support for avoiding hard work  • Planning for birth, and emergencies -mother and baby  • Knowledge and support for the birth and emergency plan  • Recognition of labour and danger signs  • Support for compliance with preventive treatments  • Support / accompaniment for pregnancy care visits  • Adolescent girls encouraged to continue going to school  • Participation in improving quality of services  • Participation in transport and financing scheme | • Maternity protection  • Time off for antenatal care visits  • Safe and clean workplace  • Tobacco free working environment  • Pregnant adolescents kept at school |
| *Situational* | • Support for taking ART and for coping with its side effects | • Support for HIV positive women |
| **Childbirth** | • Accompanying and supporting the woman in childbirth  • Support and care for the rest of the family  • Organize transport and financial support | • Support for the family during childbirth and immediate  postpartum |
| **Postpartum and**  **beyond** | • Support for exclusive breastfeeding/replacement feeding  • Personal hygiene  • Safe disposal / washing of pads  • Support for rest and less work load  • Safe and nutritive diet  • Safe sexual practices  • Motivation for prescribed treatments  • Recognition of dangers signs, including blues / depression  • Optimal pregnancy spacing  • Reporting birth and death (vital registration)  • Participation in improving quality of services  • Participation in transport and financing scheme | • Maternity leave  • Breastfeeding breaks  • Time off for postpartum and baby care visits  • If mother referred to hospital, support that she is accompanied  with the baby |
| **Newborn and young**  **infant** | • Exclusive breastfeeding  • Hygiene (cord care, washing, clothes)  • Avoiding contacts with sick family members  • Clean, warm and quiet place, tobacco and fire smoke free  • Extra care for small babies (preterm, low birth weight) including KMC  • Support for routine and follow up visits  • Motivation for home treatment of minor problems  • Recognition of danger signs  • Safe disposal of baby stool  • Care seeking at health facility or hospital | • Promotion, protection and support for breast feeding.  • Keeping mother with the baby in hospital for breastfeeding  • Supporting the family during maternal absence  • Support for referral care for sick newborn. |
| *Situational* | • Sleeping under ITN |  |

**Table 4** lists key interventions provided to women before conception and between pregnancies.

**Table 4. Care for the woman before and between pregnancies**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Care by health services** | **Home/family** | **Community and workplace** |
| **Adolescence** | • Immunization according to national  policy (tetanus and rubella)  • Family planning  • HIV prevention including VCT | • Delayed childbearing  • Healthy lifestyle  • Balanced diet, including iodized salt | • Education  • Information on prevention of HIV and  STI infections |
| **All women of**  **reproductive age** | • Family planning  • Assessment and management of STIs  • HIV prevention including testing and counselling | • Optimal pregnancy timing |  |

**Table 5** addresses unwanted pregnancies.

**Table 5. Pregnant women not wanting child**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Care by health services** | **Home/family** | **Community and workplace** |
| **Pregnant woman not**  **wanting child** | • Safe abortion (where legal)  • Post-abortion care and family planning | • Care for unwanted pregnancy |  |

**Principles of good care:**

Principles to be followed throughout service delivery-

* ***Communication***-

Communicating with the woman (and her companion), privacy and confidentiality, prescribing and recommending treatments and preventive measures for the woman

and/or her baby.

* ***Workplace and administrative procedures-***

Service hours should be clearly displayed, be punctual of time, check equipment, cleanliness maintenance, proper waste disposal, hand over essential information to the colleague who follows on duty, maintain records, smoke free environment, no advertisement of formula feed.

* ***Standard precautions and cleanliness***-

Wash hands, wear gloves, protect yourself from blood and other body fluids during deliveries, practice safe sharps & waste disposal, deal with contaminated laundry, sterilize and clean contaminated equipment, gloves.

* ***Organizing a visit***-

Receive every woman and newborn baby seeking care immediately after arrival, perform Quick Check on all incoming women and babies, begin each emergency/routine care visit, introduce self, ask name, ask problems, explain all procedures, ask permission before undertaking an examination or test or any emergency procedure, keep the woman/ relative informed throughout, discuss findings with her (and her partner), ensure privacy during the examination and discussion.

*At the end of the visit*

-Ask the woman if she has any questions.

-Summarize the most important messages with her.

-Encourage her to return for a routine visit (tell her when) and if she has any concerns.

-Fill the Home-Based Maternal Record (HBMR) and give her the appropriate information sheet.

-Ask her if there are any points which need to be discussed and would she like support for this.

**Flow-chart to be followed during services:**

A person responsible for initial reception of women of childbearing age and newborns seeking care should:

* assess the general condition of the careseeker(s) immediately on arrival
* periodically repeat this procedure if the line is long.
* If a woman is very sick, talk to her companion.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ASK, CHECK RECORD | LOOK, LISTEN, FEEL | SIGNS | CLASSIFY | TREAT |
| ■ Why did you come?  → for yourself?  → for the baby?  ■ How old is the baby?  ■ What is the concern? | Is the woman being wheeled or  carried in or:  ■ bleeding vaginally  ■ convulsing  ■ looking very ill  ■ unconscious  ■ in severe pain  ■ in labour  ■ delivery is imminent  Check if baby is or has:  ■ very small  ■ convulsing  ■ breathing difficulty | If the woman is or has:  ■ unconscious (does not answer)  ■ convulsing  ■ bleeding  ■ severe abdominal pain or looks very ill  ■ headache and visual disturbance  ■ severe difficulty breathing  ■ fever  ■ severe vomiting. | Emergency  FOR WOMAN | ■ Transfer woman to a treatment room for Rapid  assessment and management B3-B7 .  ■ Call for help if needed.  ■ Reassure the woman that she will be taken care of  immediately.  ■ Ask her companion to stay. |
| ■ Imminent delivery or  ■ Labour | Labour | ■ Transfer the woman to the labour ward.  ■ Call for immediate assessment. |
| If the baby is or has:  ■ very small  ■ convulsions  ■ difficult breathing  ■ just born  ■ any maternal concern. | Emergency  for baby | ■ Transfer the baby to the treatment room for  immediate Newborn care J1-J11 .  ■ Ask the mother to stay. |
| ■ Pregnant woman, or after delivery,  with no danger signs  ■ A newborn with no danger signs or  maternal complaints. | Routine care | ■ Keep the woman and baby in the waiting room for  routine care. |

IF emergency for woman or baby or labour/ no emergency, go to relevant section

**Making pregnancy safer in India**

**The Maternal Health situation in India**

Each year in India, roughly 30 million women experience pregnancy and 26 million have a live birth (MOHFW, 2006). With an estimated 77,000 deaths per annum, India contributes to a majority of maternal mortality burden in the region.

Maternal mortality ratio, an important indicator of maternal health in India is estimated to be 301/100,000 live births. Major causes of maternal mortality in India remain hemorrhage (38%), sepsis (11%), Abortions (8%), hypertensive disorders (5%), obstructed labour (5%) and other conditions including anemia, medical disorders during pregnancy contributing to 34% of all maternal deaths (RGI-SRS 2006).

Regional disparities in maternal and neonatal mortality are wide with states like Kerala having an MMR of 110/100,000 live births unlike Uttar Pradesh with 517/100,000. It is also recognized that delays in accessing specialized maternal care happen at all levels leading to maternal mortality and severe morbidity.

The healthcare indicator used to monitor the process of reducing maternal mortality is the proportion of deliveries attended by a skilled birth attendant.

At present, only 48% of all births are attended by skilled health professionals with only 41% institutional deliveries (NFHS 3).

It is recognized that in order to further improve maternal and newborn health by reducing mortality and morbidity related to pregnancy and child birth, it is essential to build *continuum of care* that increases access to and use of skilled care during pregnancy, birth and the post partum period.

**Specific Areas of Technical Assistance provided by WHO:**

1. Advocacy and Policy Development
2. Development of technical and operational guidelines
3. Technical contributions for development of training and reading material for ANMs/LHVs, Staff Nurses,  Medical Officers, ASHA
4. Dissemination of guidelines and facilitating planning at state level

**Partners:** Government, UN Agencies, WHO Collaborating Centre and Centres for Excellence, Professional Associations, NGOs

1. **Advocacy and Policy Development**

WHO continued advocacy for evidence based strategy of ‘skilled attendance at birth. This contributed to identification of skilled birth attendance both at institution and community, one of the key strategies of RCH-II.

To empower the peripheral health functionaries, especially ANMs, certain life saving skills and use of drugs as emergency obstetric first aid has been permitted to ANMs, e.g. Use of tablet misoprostol for prevention of PPH and Injection oxytocin for treatment of PPH, Injection Magnesium Sulphate for treatment of Eclampsia.

WHO was identified as lead Development Partner under RCH-2 to support the development of technical guidelines especially on Skilled Attendance at birth and Emergency Obstetrics Care . Extensive contributions were made by the technical team at UNFPA, India throughout the process.  In addition, this exercise was further facilitated and supported by White Ribbon Alliance of India.

Another significant contribution was the introduction of maternal death reviews which were envisaged as a tool for in-depth analysis in the factors (avoidable/ remediable) responsible for maternal mortality.

Through a multi site demonstration of use of safe techniques for abortion (Manual Vacuum Aspiration, MVA) at Primary Health Centres, WHO assisted the government with the expansion of safe abortion services at PHC and mainstreaming the same in RCH-2.  Technical assistance was provided in carrying the amendments in the MTP Act.

1. **Development of technical and operational guidelines:**

WHO, India, supported the Maternal Health Division of Department of FW in establishing the Expert Groups.  The services of consultants were hired to coordinate the development of service guidelines and treatment protocols.  It is noteworthy that WHO IMPAC series has been extensively referenced and used for adaptation and development of these guidelines.  In close partnership with UNFPA, UNICEF and WRAI, the development of following guidelines was facilitated

* Antenatal Care (ANC) and skilled birth attendance at birth for ANM/LHVs
* Normal delivery and management of obstetric complications at PHCs/CHC by MO
* Life saving anaesthetic skills for EmOC by MBBS doctors
* Guidelines for operationalising First Referral units (FRU)
* Guidelines for operationalising 24 hours functioning PHCs
* Guidelines for establishing blood storage at FRU
* Making Pregnancy Safer strategy under RCH-II

Development of National Guidelines for prevention and management of RTI/STI: In collaboration with WHOCC, National Institute of Research in Reproductive Health, WHO, India supported the development of guidelines which are expected to be followed both under RCH-2 and NACP-3.

1. **Technical contributions towards development of training and reading material for ASHA**

WHO in partnership with UNFPA supported and contributed technically in the review and development of training and reading material for ASHA.

1. **Dissemination of guidelines and facilitating planning at state level**

WHO provided the support for disseminating the guidelines to various states and also in developing their plans for implementation for maternal health interventions.  The state planning meetings have been facilitated especially with the purpose of taking the skilled birth attendant training, emergency obstetric care training and also training for life saving anaesthetic skills for MBBS doctors.

|  |  |
| --- | --- |
|  | |
|  | |
|  | |
|  |  |

**References:**

1. Integrated Management of Pregnancy and Childbirth (IMPAC) Guidelines. Pregnancy, childbirth, postpartum and newborn care: a guide for essential practice. WHO Geneva 2006.
2. Integrated Management of Pregnancy and Childbirth. WHO Recommended Interventions for Improving Maternal and Newborn Health. WHO Geneva 2007.
3. Integrated Management of Pregnancy and Childbirth. Standards for maternal and neonatal care. WHO Geneva 2007.
4. Integrated Management of Pregnancy and Childbirth. Beyond the Numbers: Reviewing maternal deaths and complications to make pregnancy safer. WHO Geneva 2007.